

IN THE CLAIMS:

The text of all pending claims is set forth below. Please AMEND claims 1-5 and ADD new claims 6 and 7 in accordance with the following:

1. (CURRENTLY AMENDED) A paper discriminator for discriminating a papers being conveyed along a conveyance path, the paper discriminator comprising:

a line sensor arranged at a first position on the conveyance path, the line sensor acquiring first data on ~~the~~an entire surface of the paper;

a point sensor arranged at a second position on the conveyance path, the point sensor acquiring second data on a part of the paper;

a memory for storing the first data and the second data in correlation with a common coordinate plane;

a data processor for acquiring ~~predetermined~~ positional information of the first data on the coordinate plane and acquiring ~~the~~a position of the second data with respect to ~~the~~a position of the first data ~~on the basis of~~based on the positional information by correlating the first data and the second data with the common coordinate plane;

a storage unit for storing first reference data of the entire surface of the paper corresponding to the first data and second reference data of the entire surface of the paper corresponding to the second data; and

a discriminator for comparing the first data with the first reference data and comparing the second data with a part corresponding to the position of the second data in the second reference data, and for discriminating the paper based on the ~~results of the comparison~~comparing.

2. (CURRENTLY AMENDED) The paper discriminator according to claim 1, further comprising:

a driver for controlling an operation start time of the line ~~pointer~~sensor or the point sensor ~~on the basis of the~~based on a difference of distance between the first position and the second position in ~~the~~a conveyance direction of the paper on the conveyance path so as to allow the first data and the second data to be correlated on the common coordinate plane.

3. (CURRENTLY AMENDED) The paper discriminator according to claim 1,

wherein the positional information includes an offset relative to ~~the a~~ reference position on the common coordinate plane and an inclination relative to ~~the a~~ reference direction.

4. (CURRENTLY AMENDED) The paper discriminator according to claim 3, wherein the first reference data and the second reference data are data for the reference position and in the reference direction, and the data processor corrects the first data and the second data into data for the reference position and in the reference direction on the common coordinate plane based on the offset and the inclination.

5. (CURRENTLY AMENDED) The paper discriminator according to claim 1, wherein the line sensor is an image sensor for taking images of the papers, and the point sensor is a magnetic sensor for detecting ~~the an~~ amount of a magnetism of the papers.

6. (NEW) A paper discriminator to discriminate a paper being conveyed along a conveyance path, the paper discriminator comprising:

a first sensor to acquire first data related to an entire surface of the paper;

a second sensor to acquire second data related to a portion of the paper;

a memory to store the first data and the second data in correlation with a common coordinate plane; and

a data processor for acquiring a position of the first data on the coordinate plane and acquiring a position of the second data with respect to the position of the first data by correlating the first data and the second data with the common coordinate plane.

7. (NEW) A method of discriminating a paper being conveyed along a conveyance path, the method comprising:

acquiring first data related to an entire surface of the paper;

acquiring second data related to a portion of the paper;

storing the first data and the second data in correlation with a common coordinate plane; and

acquiring a position of the first data on the coordinate plane and acquiring a position of the second data with respect to the position of the first data comprising correlating the first data and the second data with the common coordinate plane.